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#### [57] **ABSTRACT**

A vehicle tracking method and system using the cellular network infrastructure is disclosed. A cellular transceiver which is installed in a vehicle that requires tracking, operates on a continuous standby mode to remain constantly accessible to the cellular security provider. The cellular transceiver is turned to an active mode when tracking of the vehicle is initiated. The general location of the stolen vehicle can be determined by paging the cellular transceiver located in the stolen vehicle to identify one or more cell sites located near the stolen vehicle. The information is then relayed to a tracking vehicle which makes use of a radio direction finder to obtain an accurate bearing on the location of the stolen vehicle. In another embodiment, the tracking vehicle which is provided with a radio direction finder can determine using a global positioning system receiver its location with respect to one or more cell sites identified as being close to the stolen vehicle such that the tracking vehicle can quickly travel to the area identified by the selected cell sites.

**10 Claims, 8 Drawing Sheets**